

AMENDMENTS TO CLAIMS

1. (cancelled)
2. (cancelled)
3. (cancelled)
4. (cancelled)
5. (cancelled)
6. (withdrawn)
7. (cancelled)
8. (cancelled)
9. (cancelled)
10. (cancelled)
11. (cancelled)
12. (cancelled)
13. (cancelled)
14. (cancelled)
15. (cancelled)
16. (cancelled)
17. (cancelled)
18. (cancelled)
19. (cancelled)
20. (cancelled)
21. (cancelled)
22. (currently amended) An isolated ~~CSP~~ polypeptide or a fragment thereof having *S. mutans* ~~CSP~~ competence signal peptide-activity.
23. (currently amended) The polypeptide of claim 22 comprising a *S. mutans*-~~CSP~~ competence signal peptide.
24. (previously amended) The polypeptide of claim 23 comprising all or part of an amino acid sequence in [SEQ ID NO:2] or [SEQ ID NO:4].
25. A ~~polypeptide fragment~~ variant or a peptide mimetic of the polypeptide of claim 24, ~~or a peptide mimetic of the CSP.~~
26. (currently amended) The polypeptide of claim 24 or 25 which is recombinantly produced.

27. (currently amended) A polypeptide comprising a sequence having greater than 30%, 50% or 60% sequence identity to the polypeptide of claim 24 or 25.
28. (currently amended) The polypeptide of claim 24 or 25, isolated from *S. mutans*.
29. (withdrawn)
30. (withdrawn)
31. (withdrawn)
32. (cancelled)
33. (cancelled)
34. (cancelled)
35. (cancelled)
36. (cancelled)
37. (cancelled)
38. (new) A polypeptide wherein 1 - 15 amino acids of the polypeptide of claim 24 have been removed from the N- and/or COOH terminal of SEQ ID NO:2 or SEQ ID NO:4.
39. (new) A polypeptide wherein 2 - 5 amino acids of the polypeptide of claim 24 have been removed from the N- and/or COOH terminal of SEQ ID NO:2 or SEQ ID NO:4.
40. (new) A polypeptide wherein 6 - 10 amino acids of the polypeptide of claim 24 have been removed from the N- and/or COOH terminal of SEQ ID NO:2 or SEQ ID NO:4.
41. (new) A polypeptide wherein 10 - 15 amino acids of the polypeptide of claim 24 have been removed from the N- and/or COOH terminal of SEQ ID NO:2 or SEQ ID NO:4.
42. (new) A synthetic polypeptide having competence signal peptide activity and comprising the 21-amino acid sequence of SEQ ID NO:16.

43. (new) A polypeptide wherein 1 - 15 amino acids of the polypeptide of claim 24 have been modified to include up to 1 point mutation per each 10 amino acids of SEQ ID NO:2 or SEQ ID NO:4, or a portion thereof.

44. (new) The polypeptide of claim 43 wherein each said mutation comprise substitution with another amino acid.